

IN THE SPECIFICATION:

On page 1, prior to line 13, please insert the following paragraph:

--Cross Reference to Related Applications

This application is for entry into the U.S. national phase under §371 for International Application No. PCT/GB03/003485 having an international filing date of August 7, 2003, and from which priority is claimed under all applicable sections of Title 35 of the United States Code including, but not limited to, Sections 120, 363 and 365(c), and which in turn claims priority under 35 USC §119 to British Patent Application No. GB0218299.6 filed on August 7, 2002.--

On page 7 prior to line 2 please insert the following heading:

--Detailed Description--

On page 28, please amend the paragraph beginning at line 16 as follows:

-- In the Claims, Equation E1 is taken to be:

$$V(t) = \begin{cases} V_m \sin\left(\frac{\pi}{2} - x_1\right) & \left(\frac{\pi}{2} - x_1\right) < \text{rem}(2\pi f t, 2\pi) < \left(\frac{\pi}{2} + x_1\right) , \\ V_m \sin\left(\frac{3\pi}{2} - x_1\right) & \left(\frac{3\pi}{2} - x_1\right) < \text{rem}(2\pi f t, 2\pi) < \left(\frac{3\pi}{2} + x_1\right) , \\ V_m \sin(2\pi f t) & \text{elsewhere} \end{cases}$$

where:

$$0 \leq x_1 \leq \frac{\pi}{2}$$

and:

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$\text{rem}(2\pi f t, 2\pi)$ gives the remainder after the division $(2\pi f t)/2\pi$.

and further, Equation E2 is taken to be:

$$V(t) = \begin{cases} V_m \sin\left(\frac{\pi}{2} - x_1\right) & \left(\frac{\pi}{2} - x_1\right) < \text{rem}(2\pi f t, 2\pi) \leq \left(\frac{\pi}{2} + x_1 - x_2\right), \\ V_m \sin\left(\frac{\pi}{2} - x_1\right) \sin(2\pi f' t + \theta) & \left(\frac{\pi}{2} + x_1 - x_2\right) < \text{rem}(2\pi f t, 2\pi) < \pi, \\ V_m \sin\left(\frac{3\pi}{2} - x_1\right) & \left(\frac{3\pi}{2} - x_1\right) < \text{rem}(2\pi f t, 2\pi) \leq \left(\frac{3\pi}{2} + x_1 - x_2\right), \\ V_m \sin\left(\frac{\pi}{2} - x_1\right) \sin(2\pi f' t + \theta) & \left(\frac{3\pi}{2} + x_1 - x_2\right) < \text{rem}(2\pi f t, 2\pi) < 2\pi \\ V_m \sin(2\pi f t) & \text{elsewhere} \end{cases}$$

where:

$$0 \leq x_1 \leq \frac{\pi}{2}$$

$$0 \leq x_2 \leq 2x_1$$

$$T' = 2 \left(\frac{1}{2} - \frac{x_1}{\pi} + \frac{x_2}{\pi} \right) T$$

$$f' = \frac{1}{T'}$$

$$\theta = \text{ceil}(2 f t) \pi \left(1 - \frac{f'}{f} \right)$$

[[a]]

and and where $\text{ceil}(2 f t)$ rounds $(2 f t)$ to the nearest integer towards infinity. and Equation E3 is taken to be:

$$V(t) = \begin{cases} V_0 \sin \omega t & \text{if } 2N\pi \leq t < t_0 + 2N\pi \\ V_p \exp\left[-(t - t_0 - 2N\pi)^2 / \tau^2\right] & \text{if } t_0 + 2N\pi \leq t < 2N\pi + \pi \\ V_0 \sin \omega t & \text{if } 2N\pi + \pi \leq t < t_0 + 2N\pi + \pi \\ -V_p \exp\left[-(t - t_0 - 2N\pi - \pi)^2 / \tau^2\right] & \text{if } t_0 + 2N\pi + \pi \leq t < 2N\pi + 2\pi \end{cases}$$

In all of which equations E1, E2 and E3, the parameters are to be interpreted as described herein.--